



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/649,339

08/27/2003

Ralph L. Schipani

01450.0011-US-01

4167

22865

7590

05/25/2006

ALTERA LAW GROUP, LLC
6500 CITY WEST PARKWAY
SUITE 100
MINNEAPOLIS, MN 55344-7704

EXAMINER

CHAPMAN, JEANETTE E

ART UNIT

PAPER NUMBER

3635

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/649,339	Applicant(s) SCHIPANI ET AL.	
	Examiner Chapman E. Jeanette	Art Unit 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/9/04</u> | 6) <input checked="" type="checkbox"/> Other: <u>PATENT COPY w/ANNOTATIONS</u> |

Art Unit: 3635

Claims 10-12 is objected to for the following reasons: It is unclear of the class of inventions being claimed. Claims 10-11 recites method limitations but depends on claim 1 which is directed to an article or apparatus claim

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

gc Claims 1-~~23~~¹⁸ are rejected under 35 U.S.C. 103(a) as being unpatentable over

Muller (5822945) in view of Rhodes et al (5016418). Muller discloses a truss member comprising:

1. first and second parallel and spaced apart wall/side member having an inner and an outer surface; see figure 7 and annotations on patent copy
2. the inner surfaces of the side members forming the inner surface of the truss and the outer surface of the side members form the outer surface of the truss
3. The first and second wall members form first and second sides of the truss
4. the side edges of the wall members form corner edges
5. connections between adjacent side members form first and second set of diagonal corners
6. an elongated and planar lace cross member 42 having opposing sides and formed in a planar shape

7. first and second elongated support members 40a/b and 40c/d attached to the opposing sides of the cross member 42
8. pivoting means connected to the wall members on each corner edge of the truss; the pivoting means providing a pivotal connection to the wall members about a pivot axis
9. each support member comprising:
 - a. elongated hinge pivot 40a-d₁₋₇ members having a first end
 - b. the first end of the hinged pivot member rotatably and perpendicularly attached to the support members 40a-d at both the inner surfaces; see figures 8A and 8B
10. the first and second wall members are disposed so that the inner surface of the first wall is facing the inner surface of the second wall
11. each support members being disposed adjacent to a support member of an adjacent side member and forming a corner of the truss
12. the support members have a right triangular cross sectional shape and an external mating surface along an elongated side of the support member corresponding to the hypotenuse of the cross sectional shape
13. adjacent support members at the corners of the truss members being disposed such that mating surfaces of adjacent support members abut each others
- 14.

15. the inner surface of the first and second wall members defining an inner volume of the truss member
16. the hinged pivot members are rotatable to a folded position so that the hinged pivot members are within the inner volume and the hinged pivot member are substantially parallel to the inner surfaces of the wall members: see figure 7-8B
17. inner hinges rotatably connecting adjacent side members forming the first set of diagonal corner of the truss assembly
18. the support members 40 including receiving ends; see figure 10; the receiving ends are disposed on one end of the truss member
19. a locking end preventing rotation of the hinge pivot members
20. the folding axis of the pivot members and the pivot axis of the pivoting means are parallel to the corner edges of the truss
21. a locking end having an elongated cross bar 30: the cross bar comprising:
 - a. opposing ends
 - b. first and second joining members 36 attached to the opposing ends of the cross bar
 - c. the first and second joining members being removably attachable to the receiving ends of the first and second wall members so that the cross bar spans the support members having hinged pivot members joined therebetween

- d. the locking means connectable between at least two of the corner edges of the truss but not to all the corners. One of ordinary skill in the art would have appreciated adding as many locking means as deemed suitable or needed since adding more would strengthen the structure against any movement in a certain position

Muller lacks the external hinge member rotatably coupling the second ends of the hinge pivot members of the first wall member with the second ends of the hinge pivot members of the second wall member. Rhodes et al discloses the disclosed diagonal and horizontal cross members and the support members. Mid-length hinges pivotally joins the first and second wall members to form a set of diagonal corners of the truss assembly. It would have been obvious to one of ordinary skill in the art to include the horizontal cross members with the mid-length hinge to join the wall members and support members. With the addition of the teaching of Muller, adding the midlength hinges:

- the truss assembly is foldable so that an angle formed by the side members of the first set of diagonal corners is acute and an angle formed by the side members of the second set of diagonal corners is obtuse. See figure 5 of Rhodes et al and figures 8A and 8B of Muller

Art Unit: 3635

- the first and second elongated pivot members having first and second ends and a primary axis running between the first and second ends
- the ends of the first and second pivot members being connected to pivoting means on the first and second side of the truss
- the pivot members each comprising folding means along the folding of the pivot member along a folding axis perpendicular to a primary axis

Muller also lacks the lace members folded in a saw tooth shape. Rhodes et al discloses folding a rectangular truss with hinges in a saw tooth shape. It would have been obvious to one of ordinary skill in the art to position the hinges so that the rectangular truss can be folded in a sawtooth shape occupying less space as shown by Rhodes et al.

Regarding claim 4, 10-11: Muller lacks the exact same receiving ends and locking means but the difference does not appear critical. Muller captures the essence of the recited invention; slight modifications are within the scope of the invention to Muller. One of ordinary skill in the art would have appreciated the differences and would have employed any locking means capable of fulfilling the intended purpose of the truss.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chapman E Jeanette whose telephone number is 703-

Art Unit: 3635

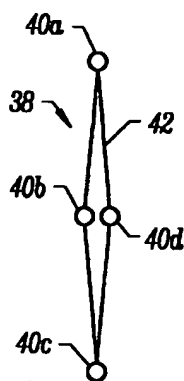
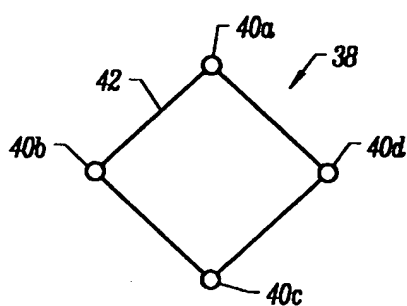
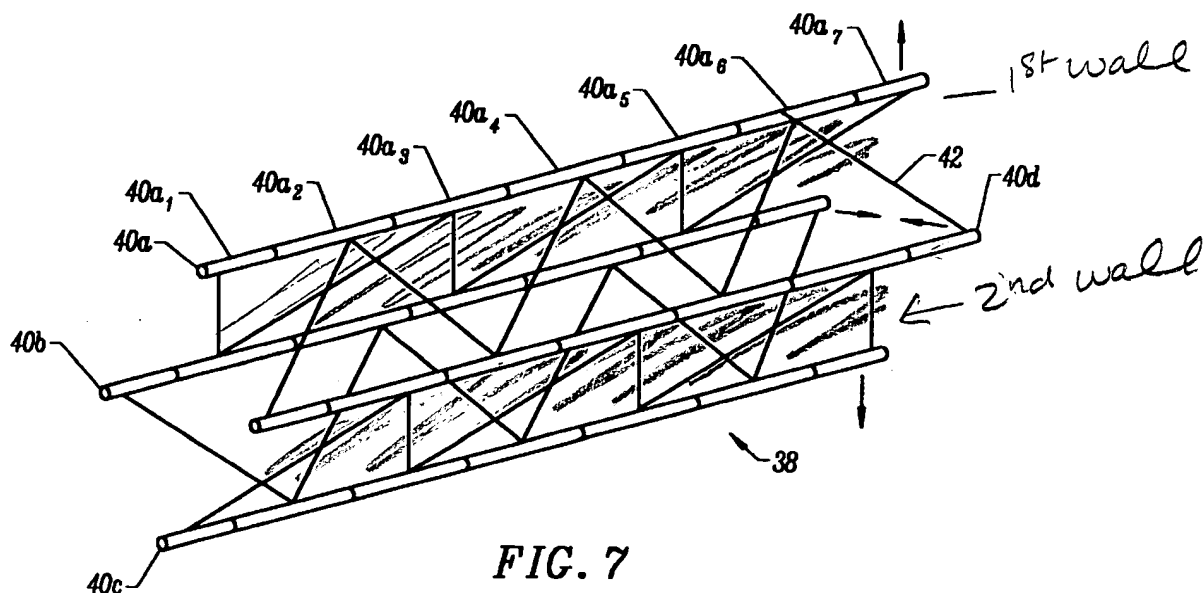
308-1310. The examiner can normally be reached on Mon.-Fri, 8:30-6:00, every other fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Friedman Carl can be reached on 703-308-0839. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jeanette Chapman
Primary Examiner

PATENT COPY W/ANNOTATIONS



PATENT COPY W/ANNOTATIONS